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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/511,036	CHEPAITIS, ANDREW
	Examiner	**Art Unit**	
	Nikolai A. Gishnock	3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 November 2008</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>8-20, 22, 23, 27-30, 36-45, 48-50 and 52-60</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>8-20, 22, 23, 27-30, 36-45, 48-50 and 52-60</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>13 October 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

In response to Applicants reply filed 11/5/2008, claims 1-7, 21, 24-26, 31-35, 46, 47, & 51 are cancelled. Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are pending.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2.   Claims 8-23, 27-30, & 59 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A dynamic font as recited in claim 1 is understood to be a data structure, because it merely describes attributes of symbols. Computer programs claimed as listings and data structures not claimed as embodied in computer-readable media are descriptive material per se, and are non-statutory because they do not define any structural or functional interrelationships between the program and/or data structure and other elements of a manufacture or machine. The claims fail because they are not directed to a process that permits the claimed functionality to be realized. See MPEP 2106.01 I.

3.   Claims 36-45, 48-50, 52, 53, 55-58 & 60 are rejected under 35 U.S.C. §101. In order to be considered patent eligible, a claimed process must contain sufficient ties to a machine, article of manufacture or a composition of matter. See *In re Comiskey*, 84 USPQ2d 1670 (Fed. Cir. 2007) and *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008). When an abstract concept has no claimed practical application, it is not patentable. The Supreme Court has reviewed process patents reciting algorithms or abstract concepts in claims directed to industrial processes. In that context, the Supreme Court has held that a claim reciting an algorithm or abstract idea can state statutory subject matter only if, as employed in the process, it is embodied in, operates on,

transforms, or otherwise involves another class of statutory subject matter, i.e., a machine, manufacture, or composition of matter. Identifying the apparatus requires that the process claim explicitly recite the particular machine or apparatus, outside of the preamble, or recite a step that inherently involves the use of a particular machine or apparatus. In the instant method claims, no apparatus, such as a computer, is claimed outside of the preamble for implementing the method; thus the claimed method seems to be a series of purely abstract mental steps. Further, a font is not considered to inherently require a computer to be printed on a physical print medium, as claimed. It is within the capacity of a human to scale and print the claimed font on a print medium, such as paper or other writing surface, without the aid of a computer or other statutory device. As such, the claim is deemed not to specifically provide a tie to another statutory class of invention, and thus is not statutory.

4.   Claims 41-45, 48, 50, 52, & 53 are further rejected under 35 U.S.C. §101 as being directed to nonstatutory subject matter. The claims fail to produce a tangible effect. The requirement to be tangible is for the claim to produce a real-world result or beneficial product. The claims fail because they merely evaluate abstract functions and do not bring about a substantial application. If the claim does not entail transformation of an article, then the claim shall be reviewed to determine that it produces a useful, tangible, and concrete result. In making this determination, the focus is not on whether the steps taken to achieve a particular result are useful, tangible, or concrete, but rather on whether the final result achieved by the claimed invention is useful, tangible, and concrete. If the claims are found not to have such a practical application, then the claim is determined to be nonstatutory. See MPEP 2106. The recited method comprising steps of changing, varying, or locating the spacing, line width, element ratios, location, or shape of symbols *when* the font size changes, in the condition where the font

size does not change, causes no method steps to occur, thus an enumerated statutory category

is not claimed.

Double Patenting

5.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent
possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting
rejection is appropriate where the conflicting claims are not identical, but at least one examined
application claim is not patentably distinct from the reference claim(s) because the examined
application claim is either anticipated by, or would have been obvious over, the reference
claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re
Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re
Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be
used to overcome an actual or provisional rejection based on a nonstatutory double patenting
ground provided the conflicting application or patent either is shown to be commonly owned with
this application, or claims an invention made as a result of activities undertaken within the scope
of a joint research agreement.
        Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6.   Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are rejected on the ground of

nonstatutory obviousness-type double patenting as being unpatentable over the claim of U.S.

Patent No. US D521,054 S in view of Desrosiers (US 6,057,858 A), hereinafter known as

Desrosiers. The claim of the '054 patent claims all of the design features of the font set forth in

the instant claims except for changing the spacing, line width, symbol element, location, shape,

or presence or some of the font characters in non-constant proportions when the font size

changes. However, Desrosiers teaches the use of scalable fonts (Abstract, also 6:41-60),

especially for use in tactile printing (7:47-8:8). The methods of using scalable fonts of

Desrosiers for tactile printing would be used to scale the font described in the '054 patent, for

the purpose of generating tactile computer output in more than two dimensions. Therefore, it

would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method of Desrosiers to modify and print the font described in the '054 patent, in order to customize tactile printed indicia on a print medium.

7.   Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claim of U.S. Patent No. US D480,750 S in view of Desrosiers. The claim of the '750 patent claims all of the design features of the font set forth in the instant claims except for changing the spacing, line width, symbol element, location, shape, or presence or some of the font characters in non-constant proportions when the font size changes. However, Desrosiers teaches the use of scalable fonts (Abstract, also 6:41-60), especially for use in tactile printing (7:47-8:8). The methods of using scalable fonts of Desrosiers for tactile printing would be used to scale the font described in the '750 patent, for the purpose of generating tactile computer output in more than two dimensions. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method of Desrosiers to modify and print the font described in the '750 patent, in order to customize tactile printed indicia on a print medium.

8.   Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claim of U.S. Patent No. US D472,265 S in view of Desrosiers. The claim of the '265 patent claims all of the design features of the font set forth in the instant claims except for changing the spacing, line width, symbol element, location, shape, or presence or some of the font characters in non-constant proportions when the font size changes. However, Desrosiers teaches the use of scalable fonts (Abstract, also 6:41-60), especially for use in tactile printing (7:47-8:8). The methods of using scalable fonts of Desrosiers for tactile printing would be used to scale the font described in the '265 patent, for the purpose of generating tactile computer output in more than

two dimensions. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method of Desrosiers to modify and print the font described in the '265 patent, in order to customize tactile printed indicia on a print medium.

9.   Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claim of U.S. Patent No. US D321,903 S in view of Desrosiers. The claim of the '903 patent claims all of the design features of the font set forth in the instant claims except for changing the spacing, line width, symbol element, location, shape, or presence or some of the font characters in non-constant proportions when the font size changes. However, Desrosiers teaches the use of scalable fonts (Abstract, also 6:41-60), especially for use in tactile printing (7:47-8:8). The methods of using scalable fonts of Desrosiers for tactile printing would be used to scale the font described in the '903 patent, for the purpose of generating tactile computer output in more than two dimensions. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method of Desrosiers to modify and print the font described in the '903 patent, in order to customize tactile printed indicia on a print medium.

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

12.   Claims 8-20, 22, 23, 27-30, 36-45, 48-50, & 52-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrosiers, in view of Chepaitis (US 4,737,108), hereinafter known as Chepaitis '108.

13.   Desrosiers teaches a computer-implemented process for generating a dynamic font (An embodiment of the present invention is a multiple media font; one type of such a multiple media font being a multiple color font {"MCF"}. In particular, in accordance with the present invention, an MCF is a scalable font {a font used to render characters in multiple sizes and output device pixel resolutions} having one or more types of embedded color scheme data and character shape data that are used in conjunction with one or more types of embedded transformation data to render characters, 5:19-30) comprising a plurality of alphabetic symbols corresponding to the letters of the Roman alphabet, wherein each of the alphabetic symbols embodies at least a physical association with its corresponding capital letter of the Roman alphabet (every nth character in the alphabet, 18:18-20), each of the alphabetic symbols has attributes including spacing between symbols, line width, shape, and presence of symbol elements, and each of the alphabetic symbols that include symbol elements also has attributes including ratio of symbol element and location of symbol element (Transformation data comprises shapes and visual looks used to render a character or a portion of a character, for example, a description of the portions of a character to which designated colors from a color scheme are to be applied. In addition, in accordance with the present invention, the transformation data comprises descriptions for transforming shapes {to produce various graphics looks} as well as for transforming colors {to produce various graphics looks such as, for example, the presence of a

source of light shining on a character}, 6:41-60); where the spacing between, line width, symbol

element ratios, location, location of the elements, shape, presence, and size of the alphabetic

symbols varies by a non-constant ratio when the font size changes (entries in parameters may

be accessible as a function of character code; entries in the parameters section reference

information may contain specifications of transformation of one or more elements in the MCF

{font}, 19:48-20:7; also, algorithms for deriving shapes by altering shapes to provide renditions

of characters in angled presentation and deriving colors by interpolating colors, 20:23-35; see

also the Abstract; the character shape transformation data is understood to be attributes of a

font; it is hence Examiner's position that the scalable MCF fonts of Desrosiers change in any

ratio desired as the font ratio or point size varies, as specified by the parameters) [Claims 9, 10,

17-20, 22, 42-45, 48, 50], and where the font is displayed on a computer screen or printed as

text on a physical print medium (1:56-58; see also Figure 1, items 100 and 400) [Claims 8, 23,

36-40, 49, & 55-60], wherein the symbols are printed or displayed using a combination of colors

(Transformation data includes one or more colors and color schemes, 6:41-60) [Claims 13, 28,

38, & 56], and wherein the symbols are tactile (8:3-8) [Claims 14, 29, 39, 57].

14.   What Desrosiers fails to teach is the alphabetic symbols being grouped into first, second,

third, and fourth regions, the first and third regions having circular frames and the second and

fourth regions having square frames, wherein: at least some of the alphabetic symbols include

elements within the frames [Claims 9, 10, 50]; wherein uppercase alphabetic symbols are

differentiated from lowercase alphabetic symbols by the present presence of a dot centrally

located above the frames of the lowercase alphabetic symbols [Claims 9 & 50]; wherein the

square frames have small points extending outwardly from the top corners to differentiate them

from circular frames [Claims 10, 52, & 53], wherein the frames of some of the alphabetic

symbols have gaps therein [Claims 11 & 54], wherein a plurality of numeric symbols having

diamond-shaped frames [Claims 16 & 41], wherein the location of the elements within the frames depends upon the font size and the location of the symbol on the display screen [Claims 36, 49, 59 & 60]. However, the details of the font are construed by Examiner to be examples of non-functional printed indicia, which is not functionally connected to the substrate. See MPEP 2112.01(III). Non-functional printed matter does not distinguish a claimed product from an otherwise identical prior art product. Where the only difference between a prior art product and a claimed product is printed matter that is not functionally related to the product, the content of the printed matter will not distinguish the claimed product from the prior art. *In re Ngai*, 367 F.3d 1336, 1339, 70 USPQ2d 1862, 1864 (Fed. Cir. 2004); *In re Gulack*, 703 F.2d 1381, 1385-86, 217 USPQ 401, 404 (Fed. Cir. 1983); and *In re Miller*, 164 USPQ 46 (CCPA 1969). Where the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability. The critical question is whether there exists any new and unobvious functional relationship between the printed matter and the substrate. In the instant case, Desrosiers teaches a method that can be applied to bitmapped fonts, pure-outline and program fonts {e.g., Postscript™}, and parametric fonts {e.g., AutoCAD} (2:6-3:53). Hence, the method for tactile printing of Desrosiers would merely be applied to perform tactile printing on a substrate or a computer display using the claimed font; there is no new and unexpected result merely changing the font to be scaled and modified by Desrosiers. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the method of Desrosiers to vary the spacing between, line width, symbol element ratios, location, location of the elements, shape, presence, and size of the symbols of a font, having first, second, third, and fourth regions, the first and third regions having circular frames and the second and fourth regions having square frames, including elements within the frames wherein uppercase alphabetic symbols are differentiated from

lowercase alphabetic symbols by the present presence of a dot centrally located above the frames of the lowercase alphabetic symbols; wherein the square frames have small points extending outwardly from the top corners to differentiate them from circular frames, wherein the frames of some of the alphabetic symbols have gaps therein, wherein a plurality of numeric symbols have diamond-shaped frames, and wherein the location of the elements within the frames depends upon the font size and the location of the symbol, by a non-constant ratio when the font size changes, because the mere details of the font modified by Desrosiers fails provide a new and unexpected functional relationship with the substrate, and thus fails to patentably distinguish over Desrosiers' multi-color, scalable fonts [Claims 9-11, 16, 36, 41, 49-54, 59 & 60].

15.   What Desrosiers further fails to teach is wherein the symbols are embossed on a surface using a tactile printing print medium [Claims 15, 30, 40, & 58]. However, Chepaitis '108 teaches where tactile symbols are embossed on a heavy grade of paper (2:63-67). A scalable MCF font taught by Desrosiers, having the user-defined details as claimed, would merely be printed using an embosser in the method taught by Chepatis '108, in order to provide tactile symbols which are easy to read by visually impaired people. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to emboss the tactile font of Desrosier in the manner taught by Chepaitis '108, in order to print symbols on a print medium that are easier to distinguish tactilely [Claims 15, 30, 40, & 58].

16.   Claims 12, 27, 37, & 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desrosiers and Chepaitis '108, and further in view of Prince et al. (US 6,568,938 B1), hereinafter known as Prince.

17.   Desrosiers and Chepaitis '108 teach all the features as demonstrated above. What Desrosiers and Chepaitis '108 fail to teach is wherein some portions of the alphabetic and

numeric symbols are printed in colored ink and other portions are printed in non-colored ink to emphasize the physical association with their corresponding capital letter of the Roman alphabet [Claims 12, 27, 37, & 55]. However, Prince teaches a printed drawing aid comprising image guide frames, which can be printed using white titanium-dioxide ink (5:43-51). The frames of Prince would be printed in a white color to delineate the font characters of Chepaitis '108. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have printed the frames of Chepaitis '108 in a non-colored ink, as taught by Prince, and in light of the teachings of Desrosiers and Jeffrey, in order to guide and grid an image pattern [Claims 12, 27, 37, & 55].

Response to Arguments

18.   Applicant's arguments filed 11/5/2008, see pages 15-21, have been fully considered but they are not persuasive. The first type of patent is sometimes referred to as a "utility" patent when being contrasted with plant or design patents. The specialized procedure which pertains to the examination of applications for design patents is treated in detail in Chapter 1500 of the Manual of Patent Examination Procedure. See MPEP 201. An application may be for a "utility" patent under 35 U.S.C. 101, a design patent under 35 U.S.C. 171, a plant patent under 35 U.S.C. 161, or a reissue under 35 U.S.C. 251. See MPEP 201.06(c)(I). In general terms, a "utility patent" protects the way an article is used and works (35 U.S.C. 101), while a "design patent" protects the way an article looks (35 U.S.C. 171). See MPEP 1502.01. Drawings in a design patent can anticipate or make obvious the claimed invention as can drawings in utility patents. See MPEP 2125. Thus, Applicant's arguments that the claims are statutory in view of 35 U.S.C. 171 are irrelevant as the instant application is a "utility" type application, as defined in MPEP 1502.01; thus, 35 U.S.C. 101 controls the statutory subject matter available for "utility"

applications. Examiner's position is that a font is mere abstract data *per se*, and thus fails to enumerate a statutory category of invention under 35 U.S.C. 101.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikolai A. Gishnock whose telephone number is (571)272-1420. The examiner can normally be reached on M-F 8:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan M. Thai can be reached on 571-272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/11/2009
/N. A. G./
Examiner, Art Unit 3715

/XUAN M. THAI/
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